and procedure. *Results:* Women were older, more symptomatic, required more urgent procedures and had more single vessel disease than men. EF was similar. At baseline, women reported more bodily pain, poorer physical and social functioning and less vitality. However, despite comparable improvement on all scales, women continued to report poorer FH, even after adjustment for differences in baseline characteristics. *Conclusion:* Men and women receive similar benefit in FH from revascularization. Because women present in poorer FH, they remain in poorer FH than men at one year post procedure.

Scale	Men (291)		Women (186)	
	Prior	Post	Prior	Post
General Health	59.6†	63.0	56.2	57.5*
Bodily Pain	51.0	73.5	45.8	66.9*
Physical Function	55.9	72.0	41.1	59.3*
Mental Health	67.1	74.4	63.1	69.4*
Vitality	43.1	57.0	36.2	50.1*

†All scores are adjusted. *$p < 0.05$

928-16 The Impact of Restenosis on Comparisons of Outcome at One Year Between Angioplasty and Bypass Surgery

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PTCA is limited by restenosis. We assessed the impact of restenosis on one year outcome comparisons between angioplasty (PTCA) and bypass surgery in the CABRI population.

Method: In 514 patients who underwent PTCA in the CABRI trial, those that clinically restenosed were identified. Clinical restenosis was defined as initially successful PTCA followed by a second attempted revascularisation, between 10–200 days inclusive, either by PTCA at the initial site or by bypass surgery, at or distal to the original site. Three groups were identified: Bypass surgery (CABG), PTCA with restenosis (RS) or without restenosis (PT). Comparisons were: PT vs CABG, and PT vs RS. Outcomes assessed were death, infarction, further revascularisations, and angina (CCS grade $\leq$ 1 or $\geq$1). *Results:* In the PTCA population RS = 12%. Death: no difference between the three groups. Infarction: non-significantly worse in PT vs CABG (Relative Risk 1.9, Confidence Interval 0.96–3.7, p = 0.064). No infarctions in the RS group. Further revascularisation: more common in PT vs CABG (RR 8.6, CI 5.14–14.41, $p < 0.0005$). No further revascularisations in the RS group. Angina: worse in PT vs CABG (RR 1.5, CI 1.01–2.1, $p < 0.05$) and also in RS vs PT (RR 2.0, CI 1.2–3.3, p = 0.006).

Conclusion: There remained a worse angina status and greater need for repeat revascularisation in the PTCA group, despite excluding those who restenosed. Furthermore, in the PTCA population those who restenosed when compared to those who did not, had a worse angina status, despite a second revascularisation procedure.

928-17 Combined Antiplatelet Pretreatment with Aspirin and Ticlopidine Reduces In-hospital Cardiac Events Following Elective Coronary Angioplasty

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In 1995, a total of 711 patients (pts, 78% male, 60 ± 9 years) with stable angina pectoris symptoms were treated electively by PTCA. Multiple vessel disease was present in 56%, and reduced ventricular function (EF < 45%) in 32%. PTCA was attempted for type B/C lesions (ACC/AHA classification) in 88% and for restenoses in 25%.

To shorten the interval between a possible stent implantation and the treatment effect of ticlopidine, all pts began antiplatelet therapy with 100 mg aspirin and 2 × 250 mg ticlopidine $\geq$1 day prior to angioplasty. During PTCA, 116 pts (group A, 16%) had stent implantation (95% Palmaz-Schatz), and 595 pts (group B) were treated by PTCA only (incl. laser angioplasty and rotational atherectomy). Stent implantation (1.4 ± 0.9 stents/pt) was primarily planned in 35%, for a suboptimal PTCA result in 50%, and for a "bail-out" in 15%. Following PTCA, $\geq$1,000 IU heparin/h were given for 24 hrs in both groups. Pts in group A continued with the combined antiplatelet regimen for 3 months followed by aspirin, group B received aspirin only. In-hospital events were compared with 1993/4 (n = 1014, no significantly different patient or lesion characteristics) without this pretreatment and with 2% stents.

Subacute stent thrombosis (SAT) in group A occured in 1/116 pts with no SAT following discharge. Thus, combined antiplatelet pretreatment in combination with a more frequent use of stents resulted in significantly reduced PTCA related cardiac events without an increase of bleeding complications during hospital stay.

Group (n)	Death	MI	CABG	Re-PTCA	Bleeding
A (116)	none	1.7%	2.6%#	0.8%	0.8%
B (595)	none	0.2%	none	0.2%	0.8%
A + B (711)	none	0.4%	0.4%	0.3%	0.8%
1993/4 (1014)	0.6%	2.0%*	0.5%	1.6%*	1%

*$p < 0.05$ vs B, and vs A + B; #3 pts had uncomplicated CABG (no MI) for intracoronary stent loss with stent removal during CABG.

928-18 Increase in Mean Platelet Volume as Parameter for Restenosis Following Successful Percutaneous Transluminal Coronary Angioplasty

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Since platelet size and activity correlate, the mean platelet volume (MPV) as a marker for platelet function was found to be increased in unstable angina and myocardial infarction and is a risk factor for future coronary events in patients after myocardial infarction. The aim of our study was to assess, whether an increased MPV 2–4 hours before PTCA influences the restenosis rate. We studied 116 patients (pat) with either stable (n = 86) or unstable angina (n = 30) referred for single-vessel PTCA. All pat underwent repeat angiography 4–6 months after PTCA regardless of symptoms. Restenosis was defined as a diameter stenosis of > 50% at angiographic follow-up.

Results:

In stable angina the MPV was significantly lower as compared to pat with unstable angina (8.1 ± 0.4 fl vs. 8.7 ± 0.5 fl; $p < 0.01$). Pat with restenosis had a MPV which was significantly larger compared to pat with no restenosis ($p < 0.01$). The pat with unstable angina who developed a restenosis had an even larger MPV than any other pat subgroup and the restenosis rate in pat with an MPV of > 9 fl was 72%.

	Restenosis		No-Restenosis	
	stable	unstable	stable	unstable
MPV (fl)	8.5 ± 0.4	8.9 ± 0.5	8.0 ± 0.4	8.3 ± 0.7

Conclusion: An increase in mean platelet volume is a risk factor and predictor for restenosis following successful PTCA in stable and unstable angina.

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Monday, March 17, 1997, Noon–2:00 p.m.
Anaheim Convention Center, Hall E
Presentation Hour: 1:00 p.m.–2:00 p.m.

929-161 Response of the Intact Left Ventricle to Increased Afterload Does not Depend on a Concomitant Increase in Coronary Perfusion Pressure

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To determine the influence of the normal concomitant increase in coronary perfusion pressure (CPP) with increased left ventricular (LV) afterload on LV afterload sensitivity, 6 autonomically blocked open-chest dogs were instrumented with ultrasonic dimension transducers and micromanometers to measure LV volume, LV pressure and CPP, respectively. The left main coronary artery was perfused through a cannula with a side gate to the aortic root. With the gate open, CPP increased in the normal manner with aortic constriction (AC). With the gate closed, CPP was maintained constant at 100 mmHg despite increased LV pressure with AC. To quantify the afterload-response under each perfusion condition, the end-systolic pressure-volume

	Gate	SW-EDV		ES PV	
		Slope (erg ml^{-1} 10^4)	Intercept (ml)	Slope (mmHg ml^{-1}	Intercept (ml)
Control	Open	7.9 ± 4.1	18.0 ± 13.7	3.8 ± 3.0	−1.9 ± 11.7
AC	Open	7.2 ± 5.0	11.3 ± 21.2	2.9 ± 3.3	−29.2 ± 38.1
Control	Closed	8.5 ± 3.3	20.9 ± 12.6	3.6 ± 2.3	−12.3 ± 34.1
AC	Closed	7.0 ± 2.9	18.7 ± 9.0	1.8 ± 0.9	−46.3 ± 29.9